

## **Warm-Up- Measures of Central Tendency- Day 1**

**1. Use the following data set: 12, 15, 14, 12, 13, 17, 11, 16**

**What is the mean?**

**What is the median?**

**What is the mode?**

**What is the range?**

**2. Mr. Johnson asked his class how many hours they study each week. The responses were as follows (in hours): 2, 3, 1, 4, 5, 4, 1, 2, 5, 6, 3, 2, 1, 6, 4, 2, 3, 4, 5**

**Can you make a dot plot (line plot) of the data? It is started for you.**

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**1      2      3      4      5      6      7**

## Measures of Central Tendency

**What are they and why are they important?**

**Mean**- the average of the numbers in a data set

**Median**- the middle number in a data set when the numbers are put in order from least to greatest

**Mode**- the number that occurs the MOST in a data set

**Range**- the difference between the largest number and smallest number in a data set

**Can you think of some everyday situations in which we use these measures? Think, pair, share.**

**Let's look at and analyze some real data.**

**The following scores were earned by Mrs. Wolf's students on the Unit 3 math test.**

**50, 50, 84, 64, 43, 77, 77, 86, 82, 66, 77, 55, 50, 70, 82, 77, 66, 64**

**Find the mean.**

**Why would the mean, or average, be so important to Mrs. Wolf?**

**Make a dot plot of the class data.**

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## **Mean Absolute Deviation**

- 1. Find the mean of the data.**
- 2. Subtract the mean from each value – the result is called the deviation from the mean.**
- 3. Take the absolute value of each deviation from the mean.**
- 4. Find the sum of the absolute values.**
- 5. Divide the total by the number of items.**

**\*Refer to example in MAD ppt. if needed.\***

**Your job for today:**

- **Use your own paper.**
- 
- **You may work with a partner.**
- 
- **Read, analyze, and complete all questions on "College Athletes" activity.**
- 
- **If you have questions, ask your partner first, then ask me.**
- 
- **When finished, move onto "Offensive Linemen" extension activity.**
- 
- **We will stop 10 minutes before the end of class to complete an Exit Ticket.**

### **EXIT TICKET**

**Create a dot plot of the following heights (in inches) of players on a basketball team.**

**75, 73, 76, 78, 79, 78, 79, 81, 80, 82, 81, 84, 82, 84, 80, 84**

**Find the mean of the data.**

**WARM-UP Measures of Central Tendency- Day 2**

**1. Find the mean of the following quiz scores. Then, put the data into a dot plot.**

**87, 73, 98, 91, 76, 75, 90, 84, 60, 100, 70, 95, 100, 76, 89, 67**

**2. Look at the data from Question 1. What is the **MAD** of the data set?**

## REVIEW AND PRACTICE

1. The **mean** is another name for the \_\_\_\_\_ of a data set.
2. To find the **mean**, what do you do?
3. To find the **MAD**, what do you do?
4. Now, we are going to use actual class data to find the **mean**, **MAD**, and create a **dot plot**. (Use class test or quiz scores).

**MEAN:**

**MAD:**

**Dot Plot:**

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**Your job for today:**

- **Write on your own paper.**
- **You may work with a partner.**
- **Complete "Analyzing Measures of Center" activity.**
- **If you have questions, ask your partner first, then ask me.**
- **When finished, move onto "Offensive Linemen" extension activity.**
- **We will stop about 10 minutes before the end of class to close our lesson.**

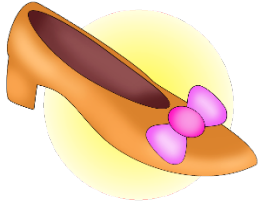
## **CLOSURE:**

**Two students were absent the day of the test and when they took the test, one earned a 75 and the other earned a 91. What would happen to the mean of our data (from the beginning of the lesson) if we added those two scores to the data set?**

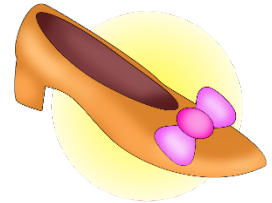
## **MONDAY/TUESDAY: SCIENCE COURT**

**We will not complete a warm-up, but will be assigning groups for our activity.**

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Student A						
Student B						
Student C						
Student D						



## **WARM-UP**



**How many different pairs of shoes can you get from a store that has 9 different styles in 5 colors and 8 sizes?**